

ATTACHMENT 3: WORK PLAN

Project Proponent: County of El Dorado, Community Development Agency (CDA), Transportation Division

Project Description: The purpose of The Headington Wash Rack Facility Project (Project) is to replace the existing uncovered vehicle and equipment wash rack with a covered wash building that houses an automated reclamation/ recycle system that not only eliminates all wastewater discharges to sewer, but also nearly eliminates the use of domestic water and grid power for operation. The Project will install an automated water treatment reclamation/recycling wash rack system and solar array at the County of El Dorado, Community Development Agency (CDA) Transportation Division, Headington Corporation Yard. The Corporation Yard is currently being used to wash County fleet vehicles at an estimated average of 75 vehicles per week including maintenance equipment that service areas from El Dorado Hills through South Lake Tahoe. Users of the facility include vehicles and equipment ranging from snow plows, graders, and loaders through passenger vehicles used by Animal Control, Law Enforcement, and other County departments. Improvements include: construction of a steel fabricated and covered vehicle wash building, solar panels, rain tanks, automated recycle tire wash system, disconnecting and plugging the existing sewer line, and providing additional industrial storm water improvements. The limits of the Project are entirely within the existing paved County Corporation Yard and do not encroach onto rights-of-way or easements.

This Project represents a unique opportunity combining elements of water conservation, renewable energy, storm water quality, and complete elimination of wastewater into a single improvement plan. Construction of this facility will yield significant advantages, including the ability to: greatly reduce dependence on potable water supplies; be energy self-sufficient; eliminate wastewater discharges to the regional treatment plant; reduce and improve storm water runoff to local streams; serve as a model fleet maintenance station for others throughout the State. Through the use of recycled water and collected rainwater to wash and maintain County vehicles and construction equipment, there will be a 98% reduction in water consumption, or approximately 600,000 gal/yr reduced to 15,000 gal/yr. These water savings will ease demand on the water system thereby reducing the amount of water needed from upstream diversions. In addition to water quantity, water quality will be enhanced through storm water management improvements.

Stormwater runoff picks up and carries with it many different pollutants such as sediment, nitrogen, phosphorus, bacteria, oil and grease, trash, pesticides and metals, which cause impairment of our local streams. To reduce the impacts of runoff, the Project will install stormwater management practices that reduce the volume and remove pollutants from runoff generated on site, in accordance with the Clean Water Act. Engineered controls will ensure the separation of industrial waste waters (i.e., wash water) from industrial storm water, channeling and directing runoff into an on-site oil water separator, using sediment basin and biofiltration devices. This also reduces the loading of non-visible or non-storm water pollutants in site discharges. To ensure protection from discharges, all industrial waste water will be held in an enclosed area providing over 200% containment. Quality control will be maintained through a rigorous site monitoring and sampling program guaranteeing proper operations and performance including up-to-date water testing equipment and training for selected oversight and quality control personnel.

Demand on the sewer system will decrease by eliminating industrial waste water discharges resulting in a savings of approximately 600,000 gal/yr. The proposed recycle treatment system will also reduce industrial solid and liquid waste discharges to disposal sites by up to 75%. Since wash water is treated and recycled onsite, less water is going into the sewer system and less water is required for treatment at the Waste Water Treatment Plant, saving both water and energy consumption. A roof top solar array on top of the new building will provide the electrical energy required to power the new wash system. Moreover, excess energy that is generated by the solar array will be sent back to the grid, and a substantial amount of energy will be saved as a result of reducing the import water and waste water demand of the facility. This Project will save approximately 2,914 kWh/yr, with a lifetime energy savings of 87,410 kWh.

Over the 30-year life of the project, County of El Dorado, CDA Transportation Division will save \$288,000 by reducing water consumption by 98% as well as sewer usage by 100% and \$54,000 by reducing energy consumption by 100%.

In addition to these water and energy benefits, the Project will result in improved material storage and safety. The Project will provide long term secondary containment controls (i.e. concrete containment) for storing and protecting selected hazardous and/or sensitive materials from spills and/or discharge. These designated locations will be designed with specific engineered controls required for storing and/or handling different materials, or performing various activities. These locations will be identified with proper signage and included on facility maps.

WORK PLAN TASKS

Task 1: Direct Project Administration and Reporting

Task Status: 0%

Administration activities include: completion of contractual paperwork; management of the Agreement, Scope of Work; preparation, submittal, maintenance, reporting of expense(s) and other non-construction project documentation; oversight of project scheduling; Agreement compliance; and preparation of invoices. County of El Dorado CDA Transportation Division will take all measures necessary to ensure compliance with applicable California Labor Code requirements. Work for this task will include all activities necessary to support preparation of quarterly progress reports and submittal of the draft and Final Project Completion Report as outlined in the Agreement.

Deliverables:

- ☐ Invoices and backup documentation
- ☐ Accurate and accessible records
- ☐ Proof of labor compliance upon request
- ☐ Quarterly Progress Reports
- ☐ Draft and Final Project Completion Report

Task 2: Project Evaluation/Design/Engineering

Sub-Task 2.1 Assessments and Evaluation

Task Status: 100%

The County maintains a Capital Improvement Program (CIP) that identifies and prioritizes strategic short- and long term infrastructure development and maintenance needs of the community. On March 18, 2014, the El Dorado County Board supported the inclusion of the Headington Wash Rack and Sewer Connection Project in the 2014 CIP. In addition, the Transportation Facilities Improvement Program (TFIP) includes capital maintenance projects, which are prioritized based on several criteria, including health and safety, ongoing maintenance costs and state or Federal requirements. This Project represents one of the projects in the TFIP.

Deliverable:

- ☐ Capital Improvement Program (2014)
- ☐ Transportation Facilities Improvement Program (2014)

Sub-Task 2.2 Final Design/Engineering

Task Status: 50%

The County completed preliminary Engineering and design specification for the Project. County of El Dorado, CDA Transportation Division staff will complete the remaining 50% for the 100% engineering plans and specifications to move forward with project construction.

Deliverable:

- ☐ 100% Engineering Plans and Specifications Documents

Task 3: Environmental Documentation

Task Status: 50%

A CEQA Initial Study/Negative Declaration was prepared August 2012. It was determined that the Project could not have a significant effect on the environment and a Negative Declaration will be submitted.

Deliverables:

- ☐ Filed CEQA documentation – Negative Declaration

Task 4: Permitting

Task Status: 0%

Obtain the permits required to implement the project. The County of El Dorado, CDA Transportation Division will prepare and process applications for a Building Permit through the El Dorado County Building Department, a General Construction Activity Storm Water Permit and National Pollutant Discharge Elimination System Permit through the State Water Resources Control Board and Regional Water Quality Control Board.

Deliverables:

- ☐ Building Permit (County)

☐ Stormwater NPDES: Construction General Permit NOI (RWQCB)

Task 5: Proposal Monitoring Plan

Task Status: 0%

Develop and submit a Project Monitoring Plan, which will include baseline conditions, a brief discussion of monitoring systems to be used, methodology of monitoring, frequency of monitoring, and location of monitoring points.

Deliverable:

☐ Project Monitoring Plan

Task 6: Project Construction/Implementation

Sub-Task 6.1 Construction Contracting

Task Status 0%

The County of El Dorado, CDA Transportation Division will prepare a construction bid package for advertisement to procure a construction contractor using the competitive public works bidding procedures of the Public Contract Code. These policies and procedures will be used to identify the construction contractor for the project based on the successful bid that meets the outlined requirements. Pre-construction activities include standard bid procedures in accordance with the applicable Public Contract Codes, and evaluation of the construction contractor's certified bonds, insurance, proof of licensure, subcontractor listings, etc. The Final Design Drawings and Specifications for this project are 50% complete and are nearly ready to be released to bid.

Deliverables:

- ☐ Advertisement for bids; pre-bid contractors meeting; contract addenda; evaluation of bids; award contract; Review Contractor Submittals
- ☐ Notice to Proceed

Sub-Task 6.2: Construction/Implementation

Task Status 0%

Mobilization and Site Preparation: Upon receiving Notice to Proceed (NTP) from the County of El Dorado, CDA Transportation Division, and approval of required pre-construction submittals as outlined in the project specifications (including contractor progress schedule, permit compliance plans, etc.), the selected contractor will mobilize equipment to the site and a staging area for materials and equipment will be established. Also access areas and required Best Management Practices (BMPs) as outlined in the approved project SWPPP will be installed prior to performing ground disturbing activities.

Project Construction: The selected construction contractor(s) will begin installing the subsurface project improvements to include the treatment and recycle system piping, and holding tanks. Also, constructed

during this time will be the support foundations for the steel building columns. As subsurface improvements near completion, the steel building will be assembled by the construction contractor and concrete improvements and finish surfaces for facility will be constructed. Final treatment and recycle system equipment and piping will also be installed as available during construction to include placing and plumbing the rainwater tanks. Upon completion of the steel building, the solar system will be installed and tied into the power grid for the facility. The treatment reclamation/ recycle system and solar power system for the project will be tested upon completion of the installation. While construction of these improvement items will be performed by the construction contractor(s), the County of El Dorado, CDA Transportation Division will contract directly with the supplier to provide the treatment and recycle system equipment (automated tire wash, sand filters, carbon filters, pumps, etc.) to reduce stacked markups and ensure design adherence and successful long term operation. This equipment will be provided to the selected construction contractor(s) for installation and testing. Also, performed by the selected construction contractor(s) will be the industrial storm water improvements and disconnecting and plugging the existing sewer line.

Demobilization: Upon completion and approval of work the selected construction contractor(s) will dismantle the staging area and demobilize equipment from the site.

Deliverables:

- ☐ Installations completed
- ☐ Final performance testing

Sub-Task 6.3: Construction Administration

Task Status 0%

County of El Dorado, CDA Transportation Division staff will serve as construction managers for the project, as they have for similar projects successfully completed by the staff. Supervision activities will include: ensuring implementation of pre-construction plans including coordination with appropriate agencies, inspection of materials prior to installation, conducting construction progress meetings as required, review of project status (percent complete versus percent spent), preparation and processing of change orders, review and approval of progress payments and recommendations for payment (as required), in-field problem solving, and other related activities. County of El Dorado, CDA Transportation Division staff will also perform survey and material testing as needed and required in the project specifications.

Deliverables:

- ☐ Supervision and documentation of all project construction activities
- ☐ Completion of final report & as-built drawings